

Calgary Molecular Pathology-FMC Agena iPLEX® HS Melanoma Panel v2: Panel content

Gene	Amino Acid Position	Mutation	Gene Position (CDS)	Comments
BRAF	p.G466V		c.1397G>T	
	p.G469A		c.1406G>C	
	p.G469V		c.1406G>T	
	p.G469E		c.1406G>A	
	p.N581S		c.1742A>G	
	p.D594N		c.1779_1780TG>GA	
	p.G593G		c.1779T>G	
	p.D594N		c.1780G>A	
	p.D594G		c.1781A>G	
	p.L597V		c.1789C>G	
	p.L597S		c.1789_1790CT>TC	
	p.L597R		c.1790T>G	
	p.L597Q		c.1790T>A	
	p.V600M		c.1798G>A	
	p.V600K		c.1798_1799GT>AA	
	p.V600R		c.1798_1799GT>AG	
	p.V600E		c.1799T>A	
	p.V600G		c.1799T>G	
	p.V600E		c.1799_1800TG>AA	
	p.V600D		c.1799_1800TG>AT	
	p.V600G		c.1799T>G	
	p.V600V		c.1800G>T	
	p.V600V		c.1800G>A	
	p.K601E		c.1801A>G	
	p.V600_K601>E		c.1799_1801delTGA	
GNA11	p.R183C		c.546_547CC>TT	
	p.R183C		c.547C>T	
	p.Q209L		c.626A>T	
GNAQ	p.R183Q		c.548G>A	
	p.Q209L		c.626A>T	
	p.Q209P		c.626A>C	
HRAS	p.Q61K		c.181C>A	
	p.Q61L		c.182A>T	
	p.Q61P		c.182A>G	
KRAS	p.K117N		c.351A>C	
	p.K117N		c.351A>T	
	p.G12D		c.35G>A	
	p.G12V		c.35G>T	
	p.G12A		c.35G>C	



Gene	Amino Acid Position	Mutation	Gene Position (CDS)	Comments
NRAS	p.G12C		c.34G>T	
	p.G12R		c.34G>C	
	p.G12S		c.34G>A	
	p.G12D		c.35G>A	
	p.G12A		c.35G>C	
	p.G12V		c.35G>T	
	p.G13R		c.37G>C	
	p.G13C		c.37G>T	
	p.G13S		c.37G>A	
	p.G13I		c.37_39GGT>ATT	
	p.G13N		c.37_39GGT>AAT	
	p.G13T		c.37_39GGT>ACT	
	p.G13H		c.37_39GGT>CAT	
	p.G13L		c.37_39GGT>CTT	
	p.G13P		c.37_39GGT>CCT	
	p.G13F		c.37_39GGT>TTT	
	p.G13S		c.37_39GGT>TCT	
	p.G13Y		c.37_39GGT>TAT	
	p.G13D		c.38G>A	
	p.G13A		c.38G>C	
	p.G13V		c.38G>T	
	p.Q61K		c.181C>A	
	p.Q61E		c.181C>G	
	p.Q61P		c.182A>C	
	p.Q61R		c.182A>G	
	p.Q61L		c.182A>T	
	p.Q61H		c.183A>C	
	p.Q61H		c.183A>T	
KIT	p.Y503_F504insAY		c.1509_1510insGCCTAT	
	p.W557R		c.1669T>A	
	p.W557R		c.1669T>C	
	p.W557G		c.1669T>G	
	p.W557_K558del		c.1669_1674delTGGAAG	
	p.V559A		c.1676T>C	
	p.V559D		c.1676T>A	
	p.V559G		c.1676T>G	
	p.V560D		c.1679T>A	
	p.L576P		c.1727T>C	
	p.K642E		c.1924A>G	
	p.V654A		c.1961T>C	
	p.T670I		c.2009C>T	
	p.D816H		c.2446G>C	



Gene	Mutation		Comments
	Amino Acid Position	Gene Position (CDS)	
KIT	p.D816Y	c.2446G>T	
	p.D816A	c.2447A>C	
	p.D816G	c.2447A>G	
	p.D816V	c.2447A>T	
	p.D820H	c.2458G>C	
	p.D820N	c.2458G>A	
	p.D820Y	c.2458G>T	
	p.D820A	c.2459A>C	
	p.D820G	c.2459A>G	
	p.D820V	c.2459A>T	
	p.D820E	c.2460T>A	
	p.D820E	c.2460T>G	
	p.N822H	c.2464A>C	
	p.N822Y	c.2464A>T	
	p.N822K	c.2466T>A	
	p.N822K	c.2466T>G	
	p.Y823D	c.2467T>G	
	p.A829P	c.2485G>C	
PTEN	p.R130G	c.388C>G	
	p.R130*	c.388C>T	
	p.R130P	c.389G>C	
	p.R130Q	c.389G>A	
	p.R130L	c.389G>T	
RAC1	p.P29S	c.85C>T	
RPS27			Chr1:153963239C>T 5'UTR
TERT	C228T_Promoter		
	C250T_Promoter		

Contact Information

Alberta Precision Laboratories (APL), Molecular Pathology Laboratory FMC
403-220-4240

References

Agena reference document: Variant List – iPLEX® HS Melanoma Panel v2 (ONC0048 01)
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